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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,555	10/07/2004	Andrew James Goodwin	MSP617NAT1	9247

137 7590 07/19/2006

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EXAMINER

SELLMAN, CACHET I

ART UNIT PAPER NUMBER

1762

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/510,555	Applicant(s) GOODWIN ET AL.	
	Examiner Cachet I. Sellman	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/7/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3-5, 7, 9-10 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodwin et al. (US 2004/0022945 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Goodwin et al. discloses a process of forming a coating on a powdered substrate (abstract and [0017]) by introducing an atomized liquid or solid coating forming material and separately transporting the powdered substrate to be coated into an atmospheric pressure plasma discharge or ionized gas and exposing the substrate to the atomized coating forming material (abstract) as required by **claim 1 and 14**. The powder can be transported entrained in a carrier gas [0015] as required by **claim 2**. The substrate can

Art Unit: 1762

be transported by being carried on a support such as a reel to reel web support ([0020] and claim 14) as required by **claims 3-4**. The reel to reel web support is made from non-woven fabric [0017] as required by **claim 5**. The atomized liquid or solid coating forming material is introduced into the atmospheric plasma discharge by direct injection [0015] as required by **claim 7**. The substrate can be silica and silicates or polymeric powdered substrates [0016-0019] as required by **claim 8**. Goodwin et al. discloses an apparatus for coating the powdered substrate which comprises a means for generating an atmospheric pressure plasma discharge [0023]; an atomizer for providing an atomized coating-forming material [0023] and means for introducing and transporting the substrate through the atmospheric pressure plasma discharge (Fig. 1) as required by **claim 9**. The plasma is generated between spaced a part parallel electrodes [0023] as required by **claim 10**.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin et al. as applied to claim 1 above in view of O'Reilly et al. (US 2004/0052028 A1).

The teachings of Goodwin et al. as applied to claim 1 are as stated above.

Goodwin et al. does not teach that the apparatus comprises a pair of parallel spaced-apart planar electrodes with a dielectric plate between each pair of electrodes and where the spacing forms a first and second plasma region as required by **claim 11**.

O'Reilly et al. discloses an atmospheric plasma assembly which has a pair of parallel spaced apart planar electrodes each bonded to a dielectric plate where the two space plates separate the dielectric plates to form a plasma region (abstract). The apparatus can be used for coating [0037]. O'Reilly et al. further states that this assembly overcomes the problem of ensuring an extended area in the workpiece/plasma area and the rest time of the plasma or workpiece moving at a constant speed can be increased which enhances the target process [0037].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Goodwin et al. to include the apparatus of O'Reilly et al. One would have been motivated to do so because both disclose processes for coating using atmospheric pressure plasma and Goodwin et al. further teaches that the apparatus overcomes the problem of ensuring an extended area in the workpiece/plasma area and the rest time of the plasma or workpiece moving at a constant speed can be increased which enhances the target process therefore one would have a reasonable expectation of success in coating the powdered substrate using the apparatus with the benefits stated by O'Reilly et al.

Art Unit: 1762

O'Reilly et al. further teaches that the electrodes are vertically arrayed (abstract). As stated above the powdered substrate can be transported by reel to reel web support as required by **claim 12**. The electrode is formed of a watertight box having a side formed by a dielectric plate having a planar electrode with a liquid inlet for spraying water onto the face of the electrode (abstract, Fig. 2, and 0041-0042) as required by **claim 13**.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodwin et al. in view of Lickfield et al. (US 5484645).

The teachings of Goodwin et al. as applied to claim 1 are as stated above.

Goodwin et al. does not teach where the powdered substrate comprises two layers of nonwoven fabric material with a powdered substrate as required by **claim 6**.

Lickfield et al. teaches a process where nonwoven fabrics of a first and second nonwoven web has a powdered layer sandwiched between and barrier layer formed onto (column 2, lines 56-column 3, lines 11-18).

It would have been obvious to one having ordinary skill in the art to modify the process of Goodwin et al. to include the use of a the nonwoven fabric of Lickfield et al. because both disclose process of coating a powdered substrate using a reel to reel process and Goodwin et al. teaches that the process can be used to coat nonwoven

Art Unit: 1762

webs as well as powdered substrates therefore one would have a reasonable expectation of success in coating the substrate.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/381,690. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 8 anticipates claim 1 of the current application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.


Art Unit: 1762

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman
Examiner
Art Unit 1762



TIMOTHY MEKS
SUPERVISORY PATENT EXAMINER